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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,688	09/29/2003	Satoshi Abe	P24336	7419

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EXAMINER	
TENTONI, LEO B	

ART UNIT	PAPER NUMBER
1732	

DATE MAILED: 07/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/671,688	ABE ET AL.	
	Examiner	Art Unit	
	Leo B. Tentoni	1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 June 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 4-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 4-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 4-6 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jamalabad et al (U.S. Patent 6,682,684 B1) for the reasons of record.

4. Claims 1, 4-6 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higashi et al (JP 2002-115004 A) for the reasons of record.

5. Claims 7, 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Jamalabad et al (U.S. Patent 6,682,684 B1) or Higashi et al (JP 2002-115004 A) as applied to claims 1, 4-6 and 9-12 above, and further in view of Exner et al (DE 19953000 A1) for the reasons of record.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1 and 4-13 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2-15 of U.S. Patent No. 6,657,155 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because forming a concave portion on a lower part of a sintered block and a declined upper surface of a concave portion would have been obvious to one of ordinary skill in the art at the time the invention was made principally in order to produce a sintered block having a desired configuration (e.g., the particular application or use of the product would determine its configuration or shape).

Response to Arguments

8. Applicant's arguments filed on 05 June 2006 have been fully considered but they are not persuasive.

9. With respect to Jamalabad et al, repeating the step of removing an excess portion would have been obvious to one of ordinary skill in the art at the time the invention was made principally because Jamalabad et al teaches repeating the steps of forming a powder layer and irradiating the powder layer, which steps result in the formation of solidified layers to form a block and also result in formation of an excess portion and this excess portion is removed during formation of the layers.

Furthermore, formation of a concave portion on a lower part of a block or a declined upper surface of a concave portion would have been obvious to one of ordinary skill in the art at the time the invention was made principally in order to produce a sintered block having a desired configuration (e.g., the particular application or use of the product would determine its configuration or shape). Thus, the results of the instantly-claimed process (page 9, lines 10-20 of the instant specification) would also be achieved by Jamalabad et al.

10. With respect to Higashi et al, repeating the step of removing an excess portion would have been obvious to one of ordinary skill in the art at the time the invention was made principally because Higashi et al teaches repeating the steps of forming a powder layer and irradiating the powder layer, which steps result in the formation of solidified layers to form a block and also result in formation of an excess portion and this excess portion is removed during formation of the layers. Furthermore, formation of a concave portion on a lower part of a block or a declined upper surface of a concave portion would have been obvious to one of ordinary skill in the art at the time the invention was made principally in order to produce a sintered block having a desired configuration (e.g., the particular application or use of the product would determine its

configuration or shape). Thus, the results of the instantly-claimed process (page 9, lines 10-20 of the instant specification) would also be achieved by Higashi et al.

11. With respect to Exner et al, the aperture size and irradiating an optical beam along an outline (or path) would have been obvious to one of ordinary skill in the art at the time the invention was made principally because Exner et al teaches as an embodiment a variable-contour mask (i.e., a mask having a desired aperture size and desired outline) to produce a desired three-dimensional object.

12. With respect to the obviousness-type double patenting rejection, claims 1, 8 and 9 do not recite an "organic material" and the powder material of Abe et al (U.S. Patent 6,657,155 B2) is not limited to organic material or inorganic material. Furthermore, forming a concave portion on a lower part of a sintered block would have been obvious to one of ordinary skill in the art at the time the invention was made principally in order to produce a sintered block having a desired configuration (e.g., the particular application or use of the product would determine its configuration or shape).

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo B. Tentoni whose telephone number is (571) 272-1209. The examiner can normally be reached on Monday - Friday (6:30 A.M. - 3:00 P.M.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina A. Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Leo B. Tentoni

Leo B. Tentoni
Primary Examiner
Art Unit 1732

lbt